

International application No.

PCT/JP02/02974

**A. CLASSIFICATION OF SUBJECT MATTER**

Int.Cl<sup>7</sup> H04M1/00

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl<sup>7</sup> H04M1/00, H04M1/24-1/253, H04M1/58-1/62, H04M1/66-1/82,  
H04M11/00-11/10, H04N7/00-7/093

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho 1922-1996 Toroku Jitsuyo Shinan Koho 1994-2002  
Kokai Jitsuyo Shinan Koho 1971-2002 Jitsuyo Shinan Toroku Koho 1996-2002

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	JP 8-125723 A (Toshiba Corp.), 17 May, 1996 (17.05.96), Full text; all drawings & US 5890071 A	1, 7, 8 2-6, 9
Y	JP 6-165073 A (Sanyo Electric Co., Ltd.), 10 June, 1994 (10.06.94), Full text; all drawings (Family: none)	2, 5, 6, 9
Y	JP 2001-54085 A (Matsushita Electric Industrial Co., Ltd.), 23 February, 2001 (23.02.01), Full text; all drawings (Family: none)	3



Further documents are listed in the continuation of Box C.



See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not  
considered to be of particular relevance

"E" earlier document but published on or after the international filing  
date

"L" document which may throw doubts on priority claim(s) or which is  
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later document published after the international filing date or  
priority date and not in conflict with the application but cited to  
understand the principle or theory underlying the invention  
document of particular relevance; the claimed invention cannot be  
considered novel or cannot be considered to involve an inventive  
step when the document is taken alone

"X"

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document of particular relevance; the claimed invention cannot be  
considered to involve an inventive step when the document is  
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combination being obvious to a person skilled in the art  
document member of the same patent family

"&amp;"

Date of the actual completion of the international search

27 May, 2002 (27.05.02)

Date of mailing of the international search report

11 June, 2002 (11.06.02)

Name and mailing address of the ISA/  
Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.

International application No.

PCT/JP02/02974

## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 2001-309250 A (Minolta Co., Ltd.), 02 November, 2001 (02.11.01), Full text; all drawings (Family: none)	4-6
Y	JP 7-99685 A (Casio Computer Co., Ltd.), 11 April, 1995 (11.04.95), Full text; all drawings (Family: none)	4-6